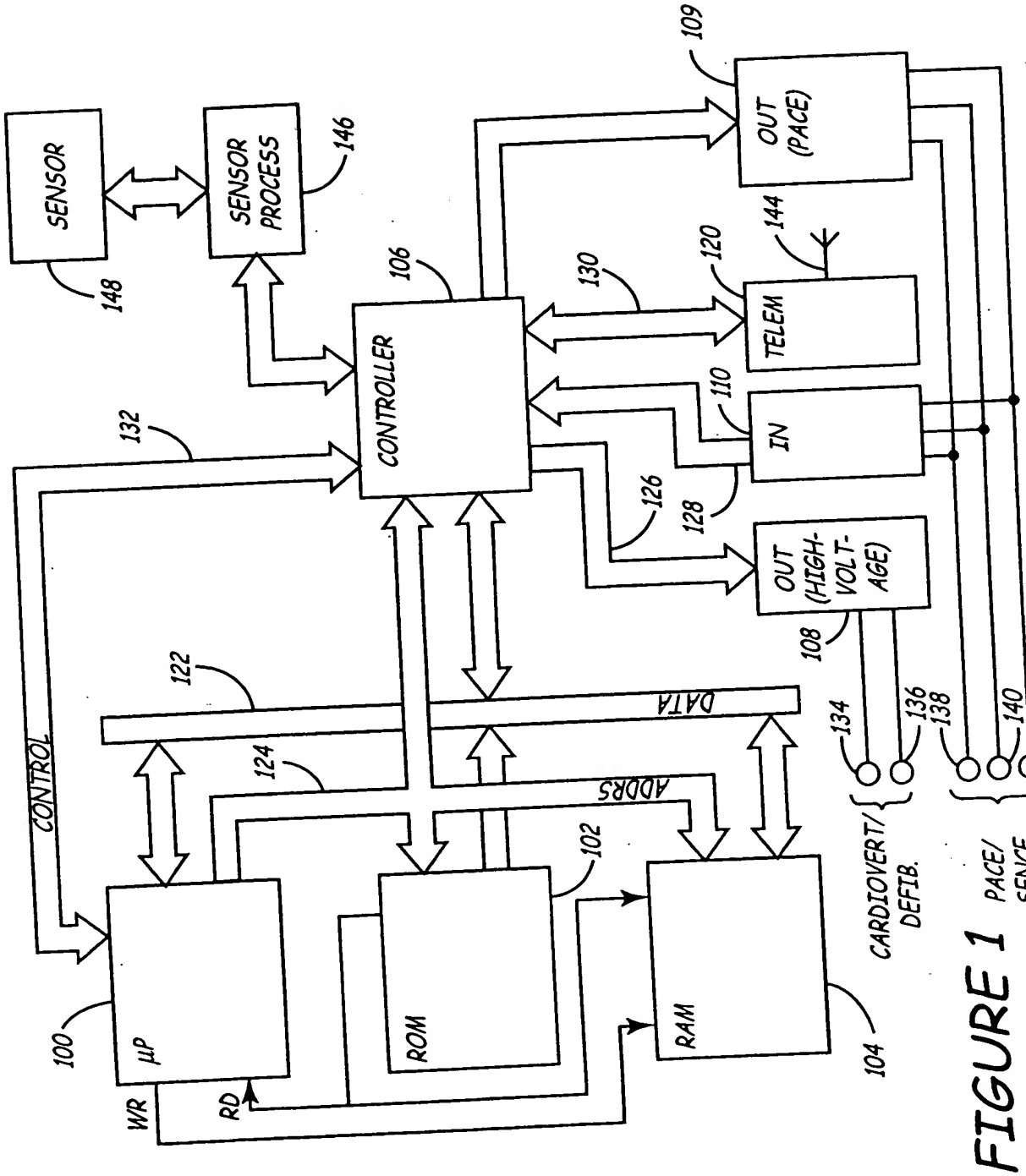
SENSOR
148
SENSOR PROCESS
146
CONTROLLER
106
OUT (PACE)
109
TELEM
120
144
IN
110
OUT (HIGH-VOLT-AGE)
108
130
132
126
128
122
DATA
124
ADDRS
CONTROL
100
µP
WR
RD
ROM
102
RAM
104
134
136
138
140
142
CARDIOVERT/ DEFIB.
PACE/ SENCE

FIGURE 1

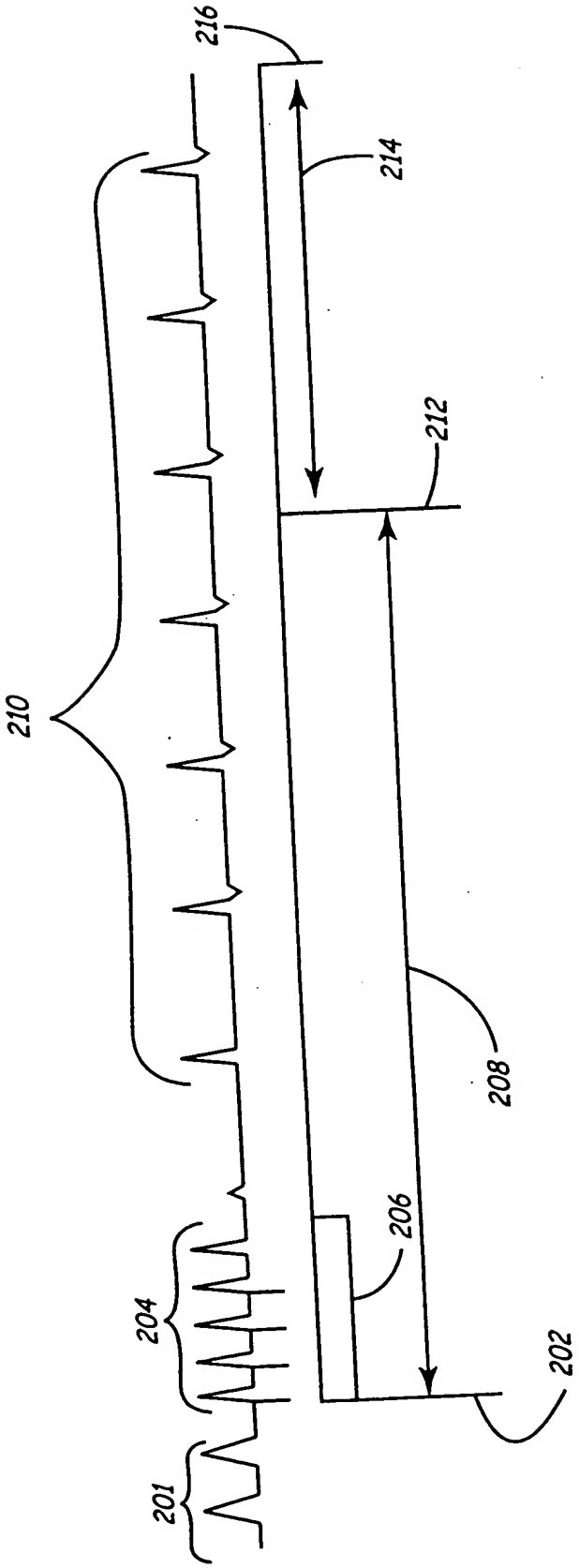


FIGURE 2

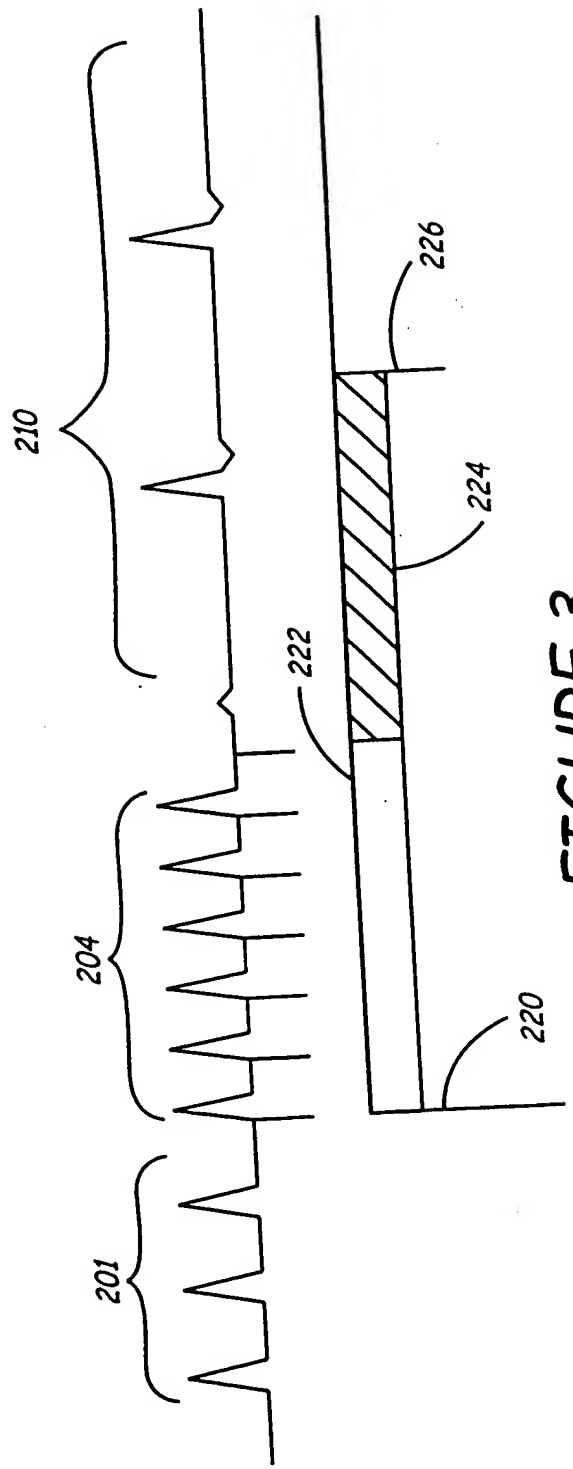


FIGURE 3

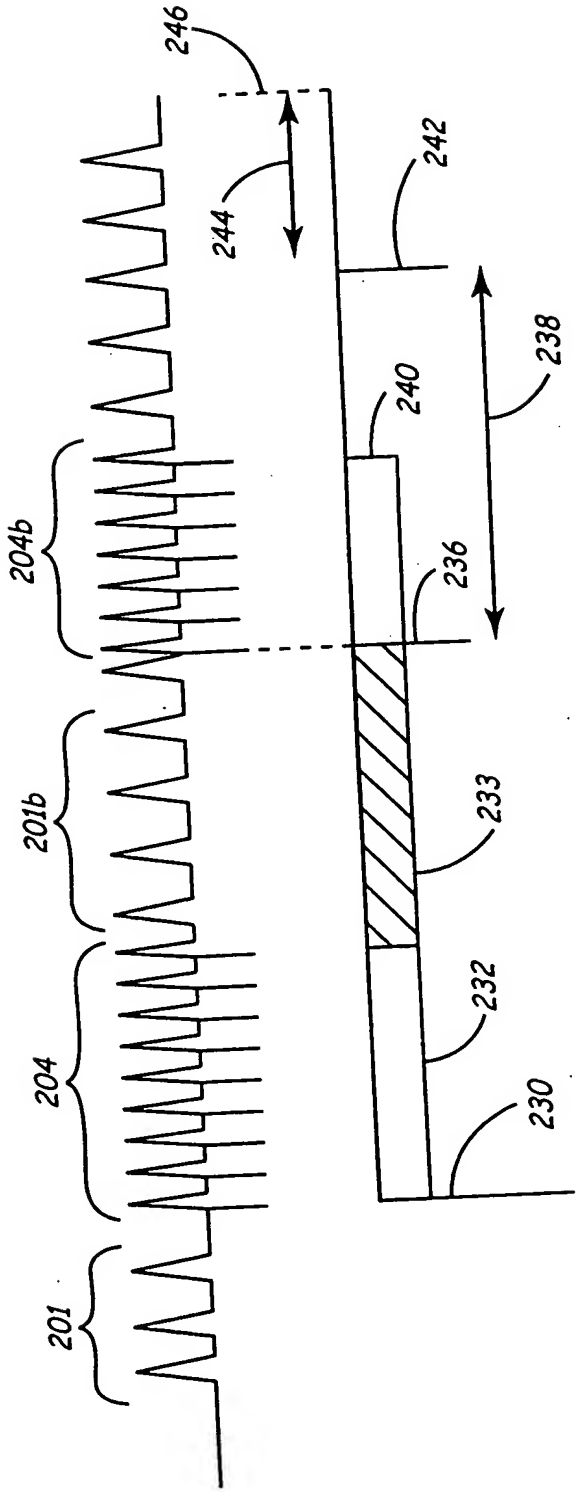


FIGURE 4

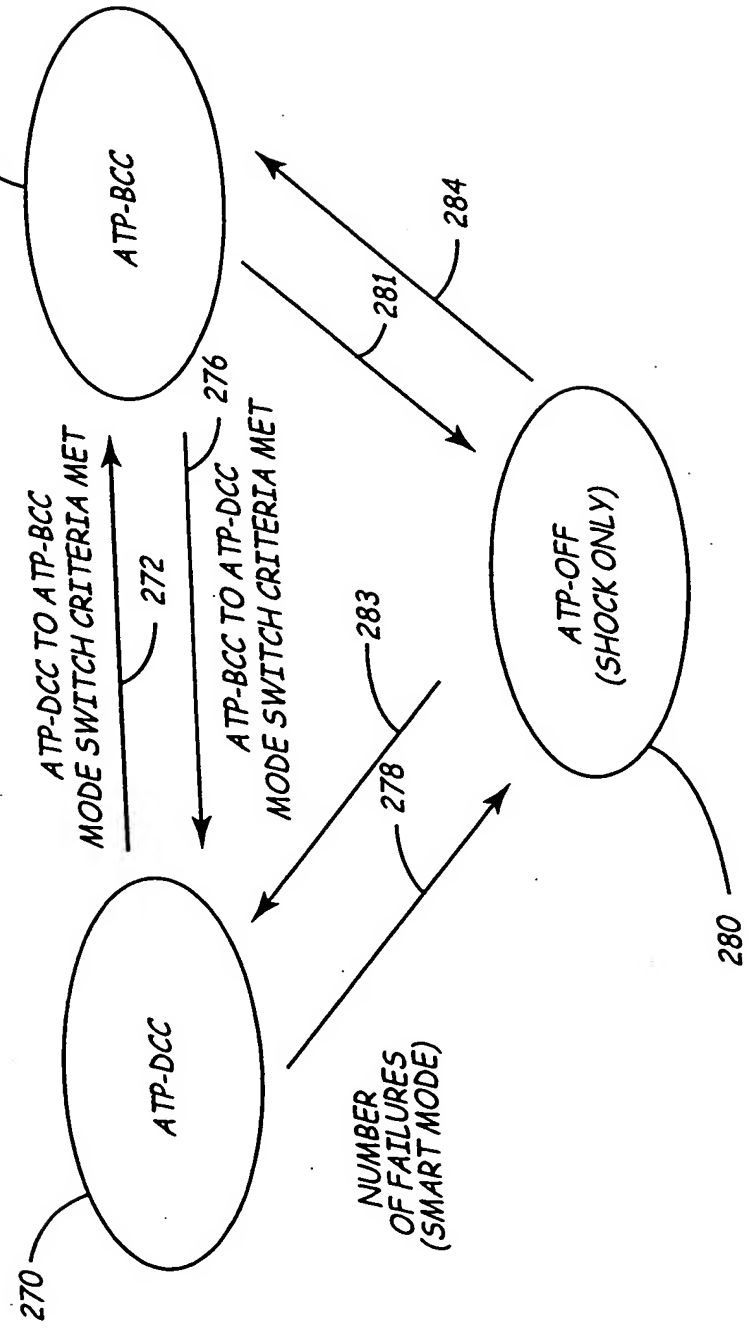
274
ATP-BCC
276
ATP-BCC TO ATP-DCC
MODE SWITCH CRITERIA MET
272
ATP-DCC TO ATP-BCC
MODE SWITCH CRITERIA MET
281
284
283
278
ATP-DCC
ATP-OFF
(SHOCK ONLY)
NUMBER
OF FAILURES
(SMART MODE)
270
280

FIGURE 5

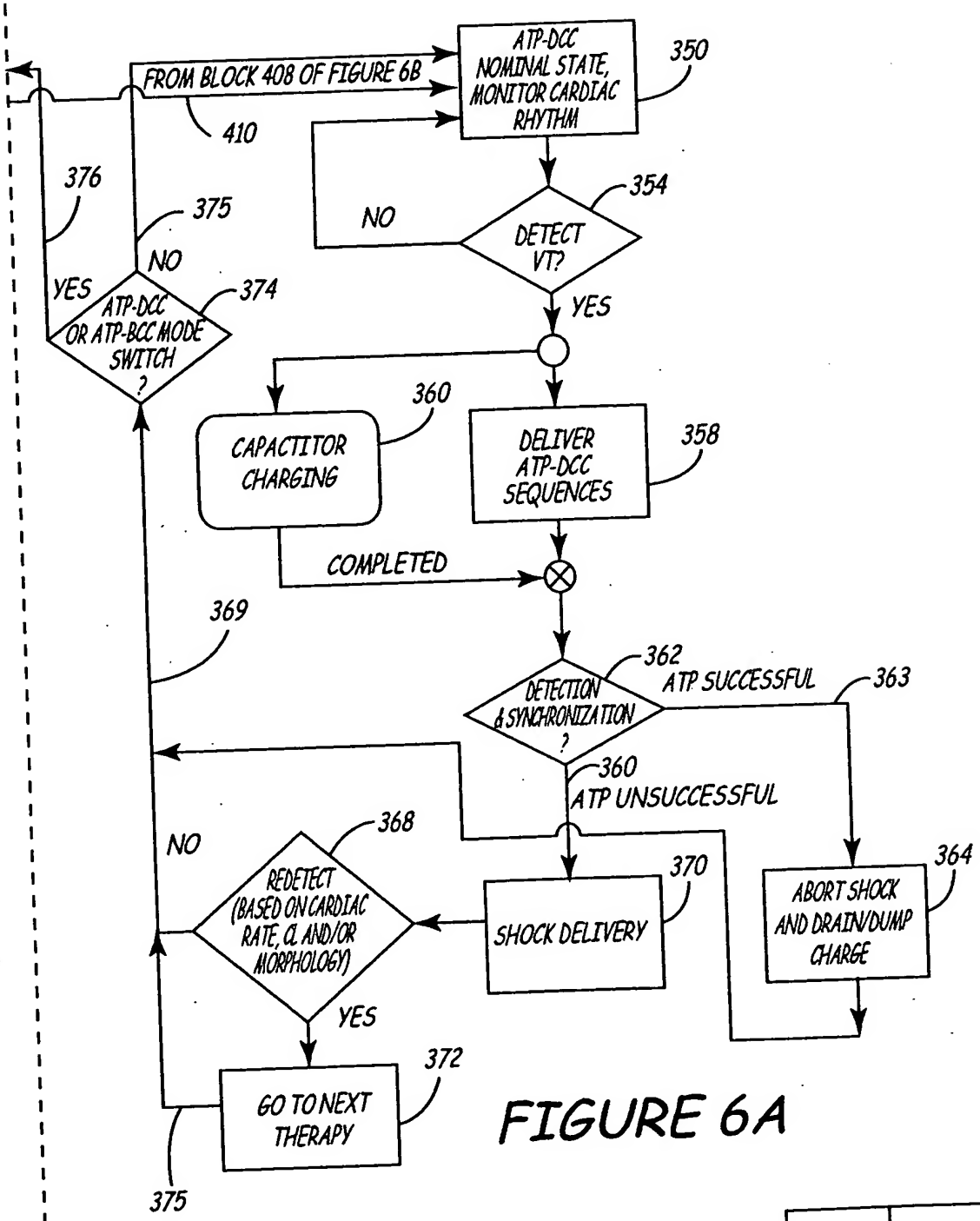


FIGURE 6A

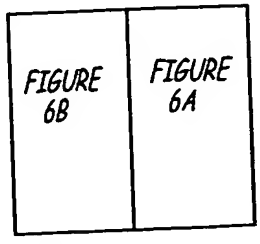


FIGURE 6

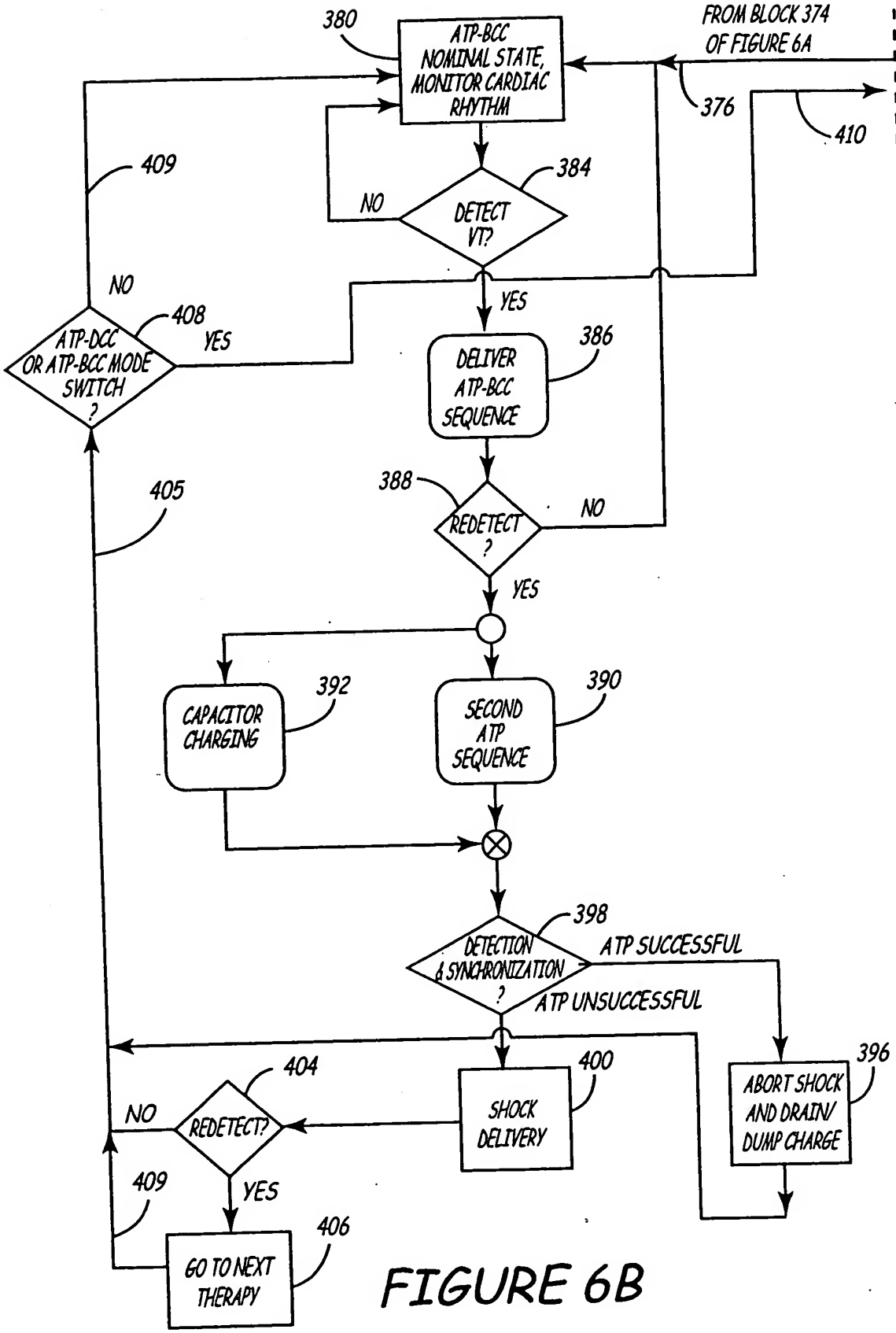
380
ATP-BCC NOMINAL STATE, MONITOR CARDIAC RHYTHM
FROM BLOCK 374 OF FIGURE 6A
376
410
409
384
NO
DETECT VT?
YES
NO
408
ATP-DCC OR ATP-BCC MODE SWITCH ?
YES
386
DELIVER ATP-BCC SEQUENCE
405
388
REDETECT ?
NO
YES
392
CAPACITOR CHARGING
390
SECOND ATP SEQUENCE
398
DETECTION & SYNCHRONIZATION ?
ATP SUCCESSFUL
ATP UNSUCCESSFUL
396
ABORT SHOCK AND DRAIN/ DUMP CHARGE
400
SHOCK DELIVERY
404
NO
REDETECT?
409
YES
406
GO TO NEXT THERAPY

FIGURE 6B

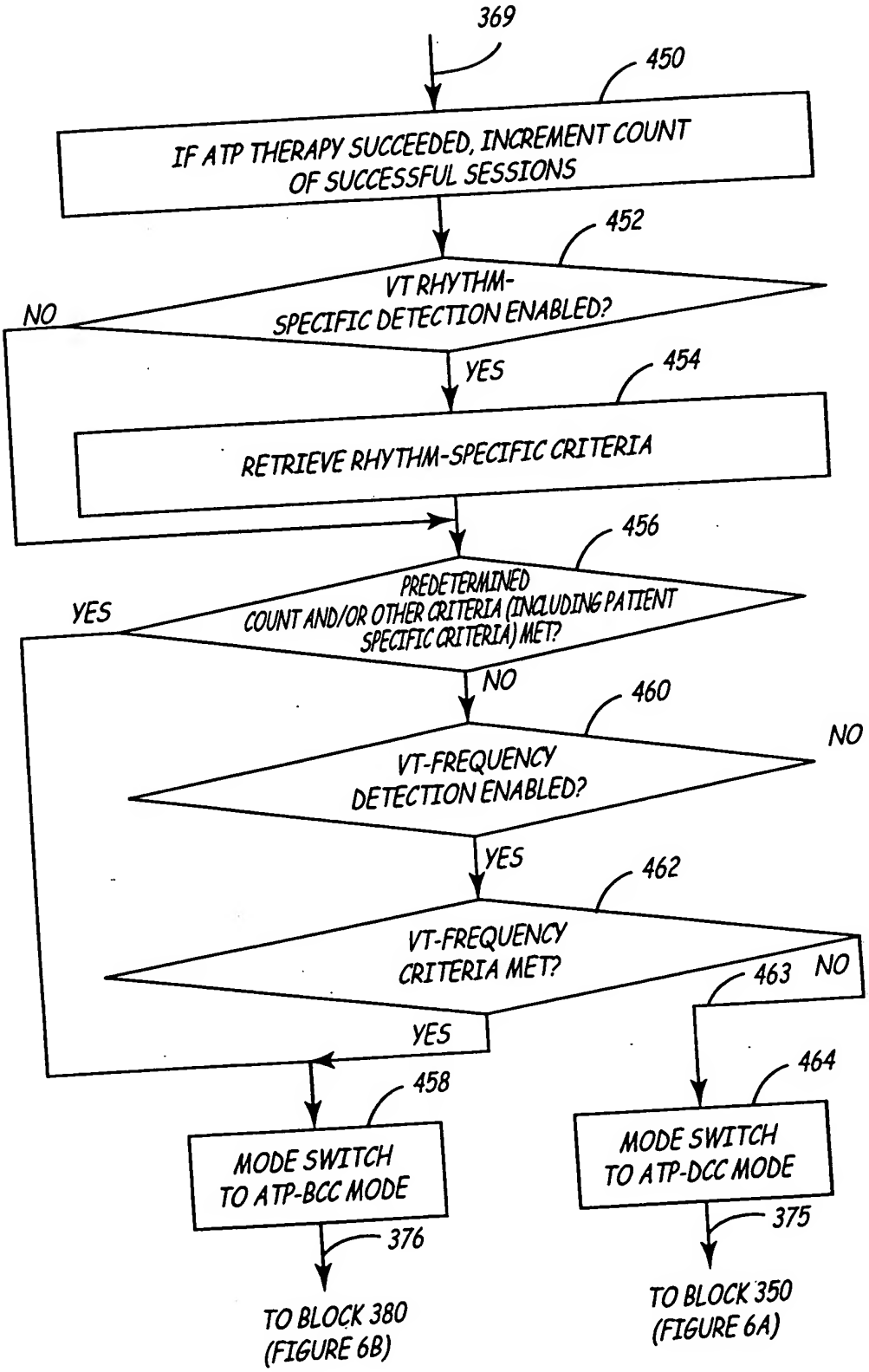
369
450
IF ATP THERAPY SUCCEEDED, INCREMENT COUNT OF SUCCESSFUL SESSIONS
452
VT RHYTHM-SPECIFIC DETECTION ENABLED?
NO
YES
454
RETRIEVE RHYTHM-SPECIFIC CRITERIA
456
PREDETERMINED COUNT AND/OR OTHER CRITERIA (INCLUDING PATIENT SPECIFIC CRITERIA) MET?
YES
NO
460
VT-FREQUENCY DETECTION ENABLED?
NO
YES
462
VT-FREQUENCY CRITERIA MET?
463
NO
YES
458
MODE SWITCH TO ATP-BCC MODE
376
TO BLOCK 380 (FIGURE 6B)
464
MODE SWITCH TO ATP-DCC MODE
375
TO BLOCK 350 (FIGURE 6A)

FIGURE 7

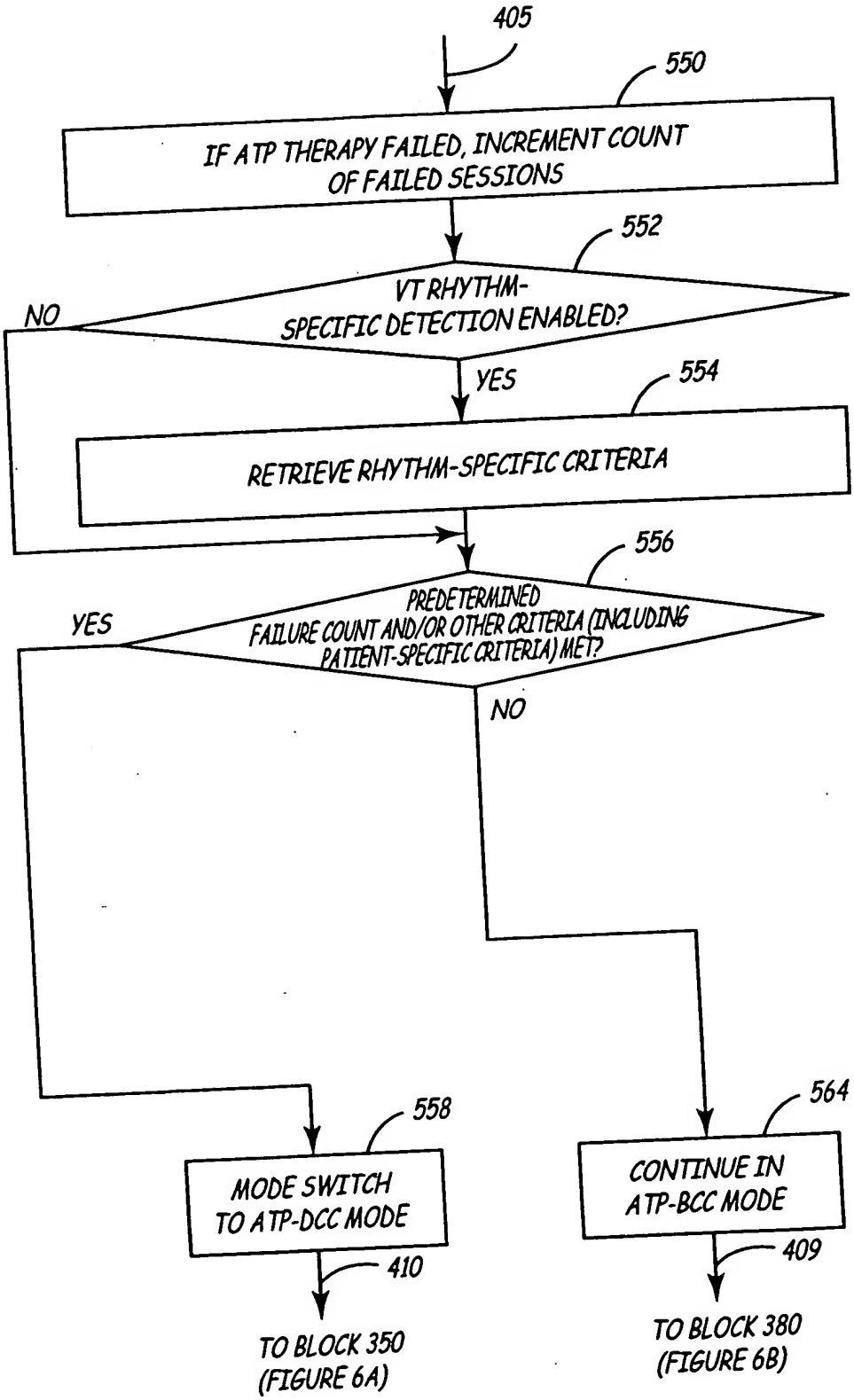
405
550
IF ATP THERAPY FAILED, INCREMENT COUNT OF FAILED SESSIONS
552
VT RHYTHM-SPECIFIC DETECTION ENABLED?
NO
YES
554
RETRIEVE RHYTHM-SPECIFIC CRITERIA
556
PREDETERMINED FAILURE COUNT AND/OR OTHER CRITERIA (INCLUDING PATIENT-SPECIFIC CRITERIA) MET?
YES
NO
558
MODE SWITCH TO ATP-DCC MODE
410
TO BLOCK 350 (FIGURE 6A)
564
CONTINUE IN ATP-BCC MODE
409
TO BLOCK 380 (FIGURE 6B)

FIGURE 8